



## Montana Ground Water Pollution Control System Application

OFFICE USE ONLY

Date Received

Check Rec'd  
Amount Rec'd  
Check No.  
Rec'd By  
Permit #

FORM  
**GW-1**  
DOMESTIC

### MGWPCS FORM GW-1 APPLICATION — DOMESTIC WASTE

Form GW-1 requests basic facility and discharge information for sources of domestic sewage that may discharge to state ground waters. This form must be completed by the owner or operator of any of source (sewage system, pond, treatment works, disposal systems, etc. [ARM 17.30.1001(13)]. *Do **not** leave blank spaces; if a question does not apply, put "NA" in the space provided.*

#### Section A Facility Information

Facility Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

City, State, Zip \_\_\_\_\_

Contact Person/Title \_\_\_\_\_

Telephone and Fax Numbers \_\_\_\_\_

Facility Location/Address \_\_\_\_\_

City, County, State, Zip \_\_\_\_\_

Telephone and Fax Number \_\_\_\_\_

Township/Range/Section/ Quarter Section \_\_\_\_\_

Latitude and Longitude \_\_\_\_\_

#### Section B Existing or Pending Permits, Certifications, or Approvals

☐ MPDES Permit # \_\_\_\_\_ ☐ Wastewater EQ# \_\_\_\_\_

☐ UIC # \_\_\_\_\_ ☐ Other \_\_\_\_\_

☐ Plat Approval EQ# \_\_\_\_\_ ☐ Other \_\_\_\_\_

#### Section C Industrial Connections Provide information for all non-domestic discharges to the treatment system.

☐ Yes ☐ No Are businesses or industrial facilities connected to the proposed treatment system?

If yes, number of industrial/business connections \_\_\_\_\_ Estimated combined flow \_\_\_\_\_ gpd

List name(s), type(s) of business or industry, and estimated flow discharging from each to the treatment works.

\_\_\_\_\_  
\_\_\_\_\_

**Section D Collection System Information** Provide information on development area being served by the wastewater treatment system. Provide the type of collection system proposed.

Population Served \_\_\_\_\_ Households Served \_\_\_\_\_

Type of Collection System \_\_\_\_\_

Check all that apply and give the percentage of each contribution.

☐ Sanitary Sewer \_\_\_\_\_ %      ☐ Storm Water \_\_\_\_\_ %      ☐ Floor Drains \_\_\_\_\_ %

☐ Sump Collection \_\_\_\_\_ %      ☐ Other \_\_\_\_\_

**Additional Information**

Use the space below to expand upon the reply to any of the above questions or to bring to the attention of the reviewer any information you believe should be considered for establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

**Section E Treatment System Information** Provide information on the actual treatment unit(s) used, including the primary and advanced systems. Indicate the design capacity of the wastewater treatment system (i.e., the wastewater flow rate that the system was, or will be, built to handle, usually 1.5 times the average daily design). For a permit renewal, provide the average daily flow rate and maximum daily flow rate for each of the last three years. For a proposed system, indicate an annual estimated volume.

Design capacity \_\_\_\_\_ gallons per day (gpd)

		<u>Two Years Ago</u>	<u>Last Year</u>	<u>This Year</u>
Annual average daily flow	<input type="checkbox"/> Actual <input type="checkbox"/> Estimated	_____ gpd	_____ gpd	_____ gpd

Annual maximum daily flow	<input type="checkbox"/> Actual <input type="checkbox"/> Estimated	_____ gpd	_____ gpd	_____ gpd
---------------------------	--	-----------	-----------	-----------

Type and calibration frequency of flow measuring device(s) \_\_\_\_\_

Manufacturer and model of flow measuring device(s) \_\_\_\_\_

What levels of treatment are provided? Check all that apply.

☐ Conventional   ☐ Level II   ☐ Primary   ☐ Other (i.e., experimental) \_\_\_\_\_  
☐ Nutrient Reduction System

Indicate the method of advanced treatment for wastewater.

☐ None   ☐ Intermittent Sand Filter   ☐ Recirculating Sand Filter   ☐ Recirculating Trickling Filter  
☐ Aerobic Sewage Treatment Unit   ☐ Chemical Nutrient Reduction   ☐ Passive Nutrient Reduction  
☐ Other (specify) \_\_\_\_\_

Indicate the following removal rates (as actual or estimated).

<input type="checkbox"/> Design BOD <sub>5</sub> or CBOD <sub>5</sub> Removal _____ %	<input type="checkbox"/> Design TSS Removal _____ %
<input type="checkbox"/> Design Total Phosphorus Removal _____ %	<input type="checkbox"/> Design Total Nitrogen Removal _____ %
<input type="checkbox"/> Design Pathogen Removal _____ %	<input type="checkbox"/> Other _____

☐ Yes   ☐ No Has effluent testing information been collected for the wastewater treatment system proposed?  
If yes, submit effluent testing data for all parameters listed in Section H.

Method(s) of disinfection used for the effluent \_\_\_\_\_

Manufacturer of disinfection unit(s), if applicable \_\_\_\_\_

Attach a line drawing that must indicate the route taken — from intake to discharge — by water in your development. Show all contributions to wastewater from homes, businesses, industries, and storm water sources to the discharge. Label components of the system, and indicate the approximate location(s) of the flow measuring equipment. The wastewater flow diagram or line drawing must indicate the effluent collection system, treatment system units, dosing tanks, distribution lines, date(s) of construction, and location(s) where samples were, or are to be, collected.

☐ Yes   ☐ No Have you attached wastewater flow diagram or schematic, including all treatment units and location(s) of flow measuring equipment ?

## Section F Disposal Methods

☐ Yes ☐ No Does the wastewater treatment system discharge the effluent onsite?

If yes, list how many each of the following types of disposal methods the treatment works uses.

☐ Discharges of treated effluent    ☐ Discharges of untreated effluent    ☐ Discharges of storm water  
☐ Combined sewer overflow points    ☐ Constructed emergency overflows (prior to treatment system)

Indicate the method(s) of wastewater disposal. (Check all that apply.)

☐ Well injection    ☐ Drainfield    ☐ Rapid Infiltration Beds    ☐ Evapotranspiration    ☐ Overland Flow  
☐ Evapotranspiration Absorption Trenches    ☐ Slow Infiltration Beds    ☐ Land Application  
☐ Surface Impoundment If yes, is impoundment(s) constructed with a synthetic liner? ☐ Yes ☐ No  
☐ Other(s) (explain) \_\_\_\_\_

Is discharge ☐ continuous or ☐ intermittent ☐ or combination of both continuous and intermittent?

Indicate the total number of discharge sites or outfalls identified. The number should correspond to the number of drainfields, land application areas, IP areas identified above. Number of outfalls \_\_\_\_\_

☐ Yes ☐ No Does the treatment works discharge or transport treated or untreated wastewater to another treatment works?

If yes, provide the following for the transporter and treatment works receiving the wastewater.

### Transporter

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

### Treatment works facility

Name \_\_\_\_\_

Address \_\_\_\_\_

Telephone \_\_\_\_\_

## Sewage Sludge Disposal

Indicate the method of disposal for sewage sludge generated at the wastewater treatment facility.

☐ Collected by private composting facility    ☐ Land application  
☐ Collected by private entity and disposed at WWTP    ☐ Landfill  
☐ Other, describe \_\_\_\_\_

## Additional Information

Use the space below to expand upon the reply to any of the above questions or to bring to the attention of the reviewer any information you believe should be considered for establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

Sections G, H, and I must be completed for each outfall identified in Section F.

(Photocopies of these sections are acceptable.)

OUTFALL # \_\_\_\_\_

## G. Description of Discharge (Outfalls)

### Location of Outfall

\_\_\_\_\_  
(City or Town)

\_\_\_\_\_  
(Zip Code)

\_\_\_\_\_  
( County)

Township\_\_\_\_N S Range\_\_\_\_E W Section\_\_\_\_ Latitude\_\_\_\_ Longitude\_\_\_\_

Depth below ground surface \_\_\_\_\_ ft Distance above ground level \_\_\_\_\_ ft

Average daily discharge volume \_\_\_\_\_gpd

Average daily dosing volume (if applicable) \_\_\_\_\_gpd Peak/Design discharge volume \_\_\_\_\_gpd

Is discharge ☐ continuous or ☐ intermittent? Indicate the month(s) the outfall discharges.

☐Jan ☐Feb ☐ March ☐ April ☐May ☐ June ☐ July ☐ Aug ☐ Sept ☐ Oct ☐ Nov ☐ Dec

If disposal method is land application, complete the following information; otherwise indicate "NA."

Number of acres \_\_\_\_\_ Soil samples collected ☐Yes ☐No If yes, attach results.

Method of application \_\_\_\_\_ Maximum volume applied in gallons per acre per day \_\_\_\_\_

Annual average daily volume applied to site in gallons per acre \_\_\_\_\_

Type or species of cover crop and estimated yield \_\_\_\_\_

Indicate the month(s) land application is conducted.

☐Jan ☐Feb ☐ March ☐ April ☐May ☐ June ☐ July ☐ Aug ☐ Sept ☐ Oct ☐ Nov ☐ Dec

### Additional Information

Use the space below to expand upon the reply to any of the above questions or to bring to the attention of the reviewer any information you believe should be considered for establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

**Sections G, H, and I must be completed for each outfall identified in Section F.**

**(Photocopies of these sections are acceptable.)**

**OUTFALL #** \_\_\_\_\_

### **H. Description of Receiving Water(s)**

Depth to shallowest ground water (ft) \_\_\_\_\_

Name of surface waters within 1 mile of outfall; include distance and direction. \_\_\_\_\_

Direction of ground water flow and method of determination \_\_\_\_\_

Include location, distance, direction, and whether upgradient or downgradient for each water supply well and spring within 1 mile of the outfall.

☐ Yes ☐ No Is list of well owners and spring owners attached to application?

☐ Yes ☐ No Is list of land owners and lessees of land within 1 mile of the outfall attached to application?

☐ Yes ☐ No Have water supply or monitoring wells been installed onsite?

If yes, attach copy of driller log(s) and date of installation. \_\_\_\_\_

☐ Yes ☐ No Are well logs attached? \_\_\_\_\_ MM/DD/YYYY

Describe existing ground water quality and uses within 1 mile of the wastewater treatment facility. All water analytical data must be attached. Report an average in the spaces provided below.

☐ Yes ☐ No Is existing ground water quality narrative and use information attached to application?

☐ Yes ☐ No Is ambient water quality analysis attached? Date(s) collected \_\_\_\_\_

☐ Specific conductivity ( $\mu\text{mhos/cm}$ ) \_\_\_\_\_

☐ Nitrate plus nitrite (as N) \_\_\_\_\_ mg/L ☐ Fecal Coliform \_\_\_\_\_ colonies/100 ml

☐ Total Phosphorus \_\_\_\_\_ mg/L ☐ Other \_\_\_\_\_

☐ Other \_\_\_\_\_ ☐ Other \_\_\_\_\_

☐ Yes ☐ No Is the operator of the wastewater treatment system requesting a mixing zone pursuant to the Administrative Rule of Montana (ARM) Title 17, chapter 30, subchapter 5?

☐ Source Specific Mixing Zone (ARM 17.30.518)

☐ Standard Mixing Zone for Ground Water (ARM 17.30.517)

### **Additional Information**

Use the space below to expand upon the reply to any of the above questions or to bring to the attention of the reviewer any information you believe should be considered in establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

**Sections G, H, and I must be completed for each outfall identified in Section F.**

**(Photocopies of these sections are acceptable.)**

**OUTFALL #** \_\_\_\_\_

**I. Hydrogeological Conditions**

Include soil types/textures (classification) and soil condition at outfall location and within 1 mile of outfall(s). Attach documentation. Include information regarding depth to bedrock, fractures, faults, seismic activity, and past/present land use.

☐ Yes ☐ No Is supplemental soils information attached to application including methods of determination, such as Natural Resource and Conservation Service soil survey?

Hydraulic gradient and direction \_\_\_\_\_ ft/ft

Hydraulic conductivity of shallowest ground water zone \_\_\_\_\_ ft/day

☐ Yes ☐ No Is supplemental data documenting hydraulic gradient and conductivity attached to application?

☐ Yes ☐ No Is list of land owners/lessees attached to application?

**Additional Information**

Use the space below to expand upon the reply to any of the above questions or to bring to the attention of the reviewer any information you believe should be considered for establishing permit limitations for the proposed facility. Attach additional sheets if necessary.

**J. Additional Required Information** Please check each box to certify compliance with these requirements.

- ☐ Topographic map, extending at least 1 mile beyond facility property boundaries. This map must show the outline of the facility and include the following information. (More than one map may be required to clearly document the required information.)
- ☐ Map clearly depicting the location of water wells and surface waters.
- ☐ Clearly identify all ground water sample locations and static water levels at the time of collection.
- ☐ Attach copies of analytical data regarding water quality upgradient and downgradient within 1 mile of wastewater disposal area.
- ☐ Attach copies of wastewater analytical data.
- ☐ Attach wastewater flow diagram or schematic including all treatment units, and approximate flows between each of the treatment units, flow measuring equipment.
- ☐ Attached geological and hydrogeological information.
- ☐ Facility plan including wastewater treatment system and flow diagram included with application.
- ☐ Mixing zone requested (delineating size and direction).
- ☐ Attach a site map and identify the major components of the collection, treatment, and disposal systems for each outfall. Information must include septic tanks, collection lines, filters, drainfields, and mixing zone for each outfall.

***Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices of the treatment works or identify appropriate permitting requirements.***

**Operation/Maintenance Performed by Contractor(s)**

- ☐ Yes ☐ No Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor?  
If yes, list the name, address, telephone number, and status of each contractor; describe the contractor's responsibilities.

Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

Telephone number \_\_\_\_\_

Responsibilities of Contractor \_\_\_\_\_

**Scheduled Improvements and Schedules of Implementation.**

Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works.

- ☐ Yes ☐ No Are planned improvements or implementation schedule required by local, state, or federal agencies?

List the outfall number for each outfall that is covered by this implementation schedule \_\_\_\_\_



**Section K Applicant Information** This application must be completed, signed, and certified as follows:

- For a corporation, by a principal officer of at least the level of vice president;
- For a partnership or sole proprietorship, by a general partner or the proprietor, respectively; or
- For a municipality, state, federal, or other public facility, by either a principal executive officer or ranking elected official.

Applicant Name\_\_\_\_\_

Mailing Address\_\_\_\_\_

City, State, Zip\_\_\_\_\_

Telephone Number \_\_\_\_\_

Is the applicant the owner or operator (or both) of the treatment works?

☐ Owner      ☐ Operator      ☐ Owner and Operator

Status of operator: F=Federal   S=State   P=Private   M=Public   O=Other   ☐

If status is "other," please specify. \_\_\_\_\_

## **CERTIFICATION**

### **All Applicants Must Complete the Following Certification.**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the persons who manage the system or those persons directly responsible for gathering the information, it is to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information; including the possibility of fine and imprisonment for knowing violation.

**A. Name and Official Title (Type or Print)**

**B. Phone No.**

**C. Signature**

**D. Date Signed**

*The Department will not process this application until all of the requested information is supplied, the application is complete, and the appropriate fees are paid [ARM 17.30.1024].*